

PRACTICE TEST 2, CHAPTER 5*Beginning and Intermediate Algebra* by Elayn Martin-Gay, 4th edition

Evaluate:

1. -3^2

2. $(-2)^3$

3. $2xy^2$ for $x=2$ and $y=-3$

Simplify each expression. Write the answers without parentheses or negative exponents.

4. $(5xy^4)^3$

5. $(-3x)(8x^3)$

6. $(2x^4y^3)^0$

7. $\left(\frac{3x^3}{2b^4}\right)^{-4}$

8. $\left(\frac{3a^5}{b^8}\right)^3$

9. $\frac{a^3}{a^{-12}}$

10. $\frac{56x^4y^2}{7x^2y^9}$

11. $\frac{x^3y^{-3}a^{-5}}{x^2y^{-4}}$

12. Classify $4x^5 - 3x^2$ as a monomial, binomial, or trinomial if possible. Find the degree of the polynomial.

Perform the indicated operation.

13. $(3x^2 + 7x - 5) + (-8x^2 - 2x + 4)$

14. $(-4x^2 - 3x + 1) - (12x^2 + 4x - 3)$

15. $3y^3(-4y^2 + 3y - 6)$

16. $(5x - 2)(2x + 4)$

17. $-2x(5x^2 - 6x + 3)$

18. $(a + 5)(a - 5)$

19. $(4x + 2)^2$

20. $(y + 5)(3y^2 - 8y + 7)$

21. $(18y^4 - 24y^2 + 6y) \div 3y$

22. $(2x^2 + 3x - 14) \div (x - 2)$

23. $\frac{3r^2 + 11r + 7}{r + 5}$

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PRACTICE TEST 2 ANSWERS

1. -9
2. -8
3. 36
4. $125x^3y^{12}$
5. $-24x^4$
6. 1
7. $\frac{16b^{16}}{81x^{12}}$
8. $\frac{27a^{15}}{b^{24}}$
9. a^{15}
10. $\frac{8x^2}{y^7}$
11. $\frac{xy}{a^5}$
12. *Binomial*;5
13. $-5x^2 + 5x - 1$
14. $-16x^2 - 7x + 4$
15. $-12y^5 + 9y^4 - 18y^3$
16. $10x^2 + 16x - 8$
17. $-10x^3 + 12x^2 - 6x$
18. $a^2 - 25$
19. $16x^2 + 16x + 4$
20. $3y^3 + 7y^2 - 33y + 35$
21. $6y^3 - 8y + 2$
22. $2x + 7$
23. $3r - 4$;27